

# INDEX.

- ABBOTT (Dr. C. C.), Flint Skin-scrapers from New Jersey, 270  
 Abney (Capt.), on Photographing Solar Spectra, 419; Photography of the Red End of the Spectrum, 432  
 Abode, the, of Snow, by A. Wilson, 4  
 Abyssinia, Sport in, Earl of Mayo, 384  
 Ackroyd (W.), Metachromism, 385  
 Acoustic Cloudiness, Prof. Tyndall, F.R.S., 72  
 Adams (Prof. W. G., F.R.S.), Action of Light on Tellurium and Selenium, 238, 419  
 Aeronautics: Balloon Accident at Vincennes, 135; French Society of, 113; in Germany, 397  
 Africa, Andersson's Notes of Travel in South, 144; Birds of North-Eastern, 289; Dr. Schweinfurth's "Artes Africanæ," 142; Italian Expedition to, 77, 155; Lieut. Cameron's Expedition, 154, 174, 202, 256, 273, 315, 414; Mr. A. S. Southworth's Journey in, 43; Stanley's Exploration of, 35, 93  
 Agassiz (L.), Geological Sketches, 383  
 Agassiz (A.), Misti and its Cloud, 107  
 Agricultural Diagrams, 36  
 Agricultural Society of England, Journal, 176  
 Agricultural Society of Scotland, 101  
 Agricultural Students' Gazette, 113  
 Agriculture, Scientific, Prof. T. Baldwin, 101  
 "Air and its Relation to Life," W. N. Hartley, 243  
 Airy (Sir G. B.), Freedom of the City of London conferred on, 35; The National Standards and, 46  
 Alaska, the Peaks of, 53  
 Algæ, Marine, of the United States, 38  
 "Algebra for Beginners," Loudon's, 404  
 Algeria, Meteorology in 217; Threatened Famine in, 414  
 Alix (Dr.), Locomotion of Birds, 3  
 Allsopp's Ales, 345, 396  
 "Alps, the Indian, and how we crossed them," by a Lady Pioneer, 246  
 Alps, Temperature of the, 532; Unequal Distribution of Rare Plants in the, 516  
 America: Dixon's "White Conquest," 23; Geological Surveys, Prof. A. Geikie, F.R.S., 1; Institute of Mining Engineers, 156 (See also United States, Philadelphia, &c.)  
 American Journal of Microscopy, 297  
 American Journal of Science and Art, 137, 277, 317, 417, 497  
 American Naturalist, 154, 358  
 Amery (C. F.), "Notes on Forestry," 6  
 Amphibians, Wiedersheim on, 30  
 Amú Darya District, 114  
 Analysts, Public, 242, 266, 287  
 "Analytical Geometry," T. G. Vyvyan, 24  
 Anatomy and Physiology, Journal of, 237, 532  
 Anderson (J.), "Mandalay to Momien," 422  
 Anderson School of Natural History, Penikese Island, U.S., 89  
 Andersson (C. J.), Notes of Travel in South Africa, 148  
 André (M. E.), Expedition to Brazil, 76  
 "Anemology," M. Ansart on, 375  
 Angelsey, how it became an Island, Prof. A. C. Ramsay, 279  
 "Angola and the River Congo," Monteiro's, 161  
 "Animal Parasites," Van Beneden's, Dr. Spencer Cobbold, F.R.S., 303  
 Antarctic Exploration, 475  
 Anthropological Institute, 59, 99, 200, 239, 279, 318, 440, 499, 535  
 Anthropological Society, 158  
 Anthropology, Bulletin de la Société d'Anthropologie, 198  
 Ants, Bees, and Wasps, Sir J. Lubbock on, 37, 359  
 Ants, Habits of, Fritz Müller, 304  
 Aphasia, Case of, 400  
 Aquarium, A. W. Wills on the Marine, 189; Manchester, 77, 85; Southport, 197; Westminster, 255; Yarmouth, 77  
 Archæology, Researches in Kentucky and Indiana, 109  
 Archiv für Anthropologie, 130  
 Archives des Sciences Physiques et Naturelles, 237  
*Arctia caja*, Caterpillar of, 54  
 Arctic Seas, J. Lamont's Yachting in the, 264  
 Arctic Expedition, 335; Capt. Adams on, 36  
 Arctic Exploration, German Commission on, 34, 73, 75; Lieut. Weyprecht on, 33; the Swedish Expedition, 116  
 "Arctic World," The, 146  
 Argentine Republic, 53, 189  
 Arrows, poisoned, of the Papuans, 235  
 Arsenic Eating in Germany, 57  
 Ash Seed Screw, 428; Francis Darwin, 465; Dr. W. McLaurin, 512  
 Asia (Eastern), Zoology of, 53  
 Asiatic Society of Bengal, 259  
 Astrocrites, Mr. R. M. Etheridge on, 339  
 Astronomical Column, 8, 27, 47, 87, 108, 129, 150, 168, 188, 208, 226, 238, 248, 268, 287, 306, 326, 348, 367, 386, 406, 428, 449, 467, 486, 513  
 Astronomical Objects, Birds as, Prof. A. Newton, F.R.S., 447  
 Astronomical Society, 58, 158, 318, 419, 534; M. Leverrier at, 314; present of books to, 397  
 Astronomische Nachrichten, 8, 27  
 Astronomy: Bessel's works, 27; Bulletin International, 255; new works in, 88  
 Atlas Météorologique, 256  
 Atlas Pleiadum, 453, 129  
 Atmometer, Self-registering, 79  
 Auricula, Prof. Kerner on the, 94  
 Aurora Borealis and Geissler Tubes, 237  
 Australia, Exploration of, 154; First Geological Map of, 352; Forrest's Explorations in, 83; Meteorological Reports, 196; Meteorology of, 396; Australian Implement, J. P. Glover, 27  
 "Australian Heroes," Charles H. Eden, 323  
 Baboon, Dr. H. B. Major on the Brain of, 196  
 Bacteria, Prof. Tyndall, F.R.S., on, 252, 268  
 Baden, Meteorology in, 25  
 Baker (Valentine), "Clouds in the East," 484  
 Balard (M.), Death of, 457; Obituary Notice of, 475  
 Baldwin (Prof. T.), Scientific Agriculture, 101  
 Ball (Dr., F.R.S.), "Theory of Screws," 463  
 Balloon Accident in Paris, 155; at Vincennes, 135  
 Baltic and North Sea, Report on, 53  
 Bar-magnets and Conducting-wires, G. Gore, F.R.S., 176  
 Barbary Races, Papers on the, 436  
 Barometer, T. Stevenson on a proposed Optical, 150  
 Bartlett (R. E.), the River-beds of the Riviera, 406, 448  
 Basalt, the Cup-shaped Joints in Prismatic, G. Poulett Scrope, F.R.S., 47; Prismatic, 7, 47  
*Basidiomycetes*, Fertilisation of, 157, 186  
 Bastian (Dr. H. C., F.R.S.), Prof. Tyndall on Germs, 284, 324  
 Bath Field Club, Proceedings of, 20  
 Bathometer, Dr. Siemens', 431  
*Batrachia* and *Reptilia* of Costa Rica, 257  
 Bax (Capt. B. W.), "The Eastern Seas," 185  
 Baxter River, New Guinea, 76  
 Beats in Music, Dr. Wm. Pole, F.R.S., 212, 232  
 Beccari's Exploration of New Guinea, 336  
 Bees and Flowers, Sir J. Lubbock, 10; Thomas Belt, 26  
 Bees, Communication of Information among, Prof. H. Blackburn, 68  
 Bees, Wasps, and Ants, Sir J. Lubbock on, 37  
 Behring's Straits, Expedition to, 217

- Belfast Natural History Society, 95; Naturalists' Field Club, Report of, 38  
 Belgian Academy, Prizes of the, 413  
 Belgium, Horticulture in, 95  
 Belt (Thomas) Bees and Clover, 26; the Drift of Devon and Cornwall, 58  
 Benedict (Dr.), on Crime, 34  
 Bengal, W. G. Willson on the Meteorology of, 66  
 Bennett (A. W.), the Absorptive Glands of Carnivorous Plants, 403; Sir Thomas Millington and the Sexuality of Plants, 85, 166, 185  
 Bennett (J. J., F.R.S.), Obituary Notice of, 418  
 Bentley and Trimen's "Medicinal Plants," 36  
 Berlin, Geographical Society, 337; German Chemical Society, 80, 119, 178, 259, 319, 360  
 Berwickshire Naturalists' Field Club, Proceedings, 19  
 Besant (W. H., F.R.S.), "Conic Sections," 24  
 Bessel's Astronomical Works, 27, 248  
 Bhutas Worship in Western India, 158  
 Binary Stars, 69, 287, 349  
 "Biology," Article on, in "Encyclopædia Britannica," 221  
 Biology, Letourneau's, 404  
 Bird (C.), "Twelve Maps for Map-drawing," 7  
 "Birds," Article on, in "Encyclopædia Britannica," 221, 266, 247; Dr. Alix on the Locomotion of, 3; As Astronomical Objects, Prof. A. Newton, F.R.S., 447; of Madagascar, Dr. Hartlaub's Work on the, 272; of North-Eastern Africa, 289; of the Pelew Islands, 152; the Sailing Flight of, 324; Skulls of, Prof. Parker, F.R.S., on, 178  
 Birmingham, Philosophical Society, 396; Science Classes and Penny Lectures in, 149; Sir Josiah Mason's College at, 174  
 Blackburn (Prof. H.), Communication of Information among Bees, 68  
 Blasius on Storms, 421  
 Blowpipe, Works on the, 164  
 Blowpipe Analysis, 186, 208, 224  
 Boisbaudran (M. L. de) on some Properties of Gallium, 136  
 Bonavia (Dr. E.), a Relapsed Donkey, 486  
 Bone-caves of the Creswell Crags, 534  
 Bonnat (M.), Exploration of the Gold Coast, 94  
 Boomerang, the, Rev. H. H. Higgins, 168  
 Boston Natural History Society, 60  
 Botanic Garden, Oxford, 61, 94, 315  
 Botanical Locality Record Club, Report of, 36  
 Botany: Botanical Notes, 38, 117; Calcutta Botanical Gardens, 117; Lectures on, at South Kensington, 436; W. J. Brown's Manual of, 85  
 Bothkamp Sun Observations, Dr. A. Schuster, 402  
 Bottomley (J. T.), the Use of the Words "Weight" and "Mass," 325, 446  
 Boulger (G. S.), Glands of the Cherry Laurel, 107  
 Boyle (Hon. Robert), his Portrait, 76  
 Brazil: Kitchen Middens, Fritz Müller, 304; Maps at Railway Stations, 77; M. E. André's Expedition to, 76  
 Bremen, the Museum of, 273  
 Bristol, University College at, 113, 134, 488  
 Bristol and Gloucestershire Archaeological Society, proposed, 316  
 Bristow (H. W., F.R.S.), Tables of British Strata, 464  
 British Association, Deputations from, on Scientific Instruction, 371; Meeting at Glasgow, 335; President for 1876, 530  
 British Insects, Houghton's Sketches of, 365  
 British Museum, 414  
 Brittain, Hutchinson's Summer Holidays in, 465  
 Brown (J. A., F.R.S.), Effects of the Sun's Rotation and the Moon's Revolution on the Earth's Magnetism, 328; Lisbon Magnetic Observations, 301, 448; Origin of the Numerals, 47  
 Browne (W. J., M.A.), Botany for Schools, 85  
 Brussels, Climate of, 296; Cold in, 235; Observatory, 254  
 Bryant and May's Matches, W. H. Preece, 208  
 Buchan (Alex.), The Flowering of Spring Plants, 249; Swedish forms for observing Cirrus Clouds, 7  
 Buckland (Miss), Rhabdomancy, 200  
 Buckley (A. B.), "History of Natural Science," 343  
 Buckton (C. M.), Health in the House, 384  
 Bulletin de l'Académie Royale des Sciences, 78  
 Bulletin International, 255, 256  
 Bulletin de la Société d'Anthropologie de Paris, 198  
 Bullfinches and Primroses, 427  
 Burchett's "Practical Plane Geometry," 223  
 Burton's Gorilla Land and the Congo, 123  
 Butter Case, the recent, 271, 287  
 Butterflies, Fossil, S. H. Scudder, 222  
 Calcutta, Botanical Garden, 117; Rain/fall of, 436  
 Calico Printing, Crace-Calvert's, R. Meldola, 283  
 California, Academy of Sciences, 180  
 Calligraphy as a test of Character, 77  
 Cambridge University Board of Mathematical Studies, 434; Clothworkers' Exhibitions, 316; Exhibitions at Christ's College, 113; Human Anatomy at, 151; Local Examinations, 95; Memorial from Members of, 474; Natural Science Club, 155; Natural Science Lectures at, 316; Natural Science Scholarships, &c., for 1876, 292; Philosophical Society, 40, 60, 160; Report of the Studies Syndicate, 414; Scholarships at Caius College, 256; Scholarships at Clare College, 155; Students at Dr. Dohrn's Zoological Station, 113; University Commission, 414; "Wort's Scholarships," 315  
 Camerarius and the Sexuality of Plants, 85  
 Cameron (Lieut.), Expedition in Africa, 154, 174, 202, 256, 273, 296, 315, 414, 530; his return from Africa, 436; Arrival at Liverpool, 456; at the Geographical Society, 473; and the French Geographical Society, 473  
 Campbell (J. F.), "My Circular Notes," 481  
 Canary Islands, Gauch Population of, 335; the Volcanic Rocks of the, 403  
 Cardiff Naturalists' Society, 16  
 Cardiograph, a Modified, 471  
 Carnivorous Plants, the Absorptive Glands of, 36, 403  
 Carrington (R. C., F.R.S.), Death of, 134  
 Casella (L.), a New Compass, 135  
 Caspian Sea, the Fauna of the, 74  
 Castleton, Museum at, 335  
 "Catechism of Chemistry," 464  
 Caterpillars and Linen, 54  
 Cats, White, and Deafness, 495  
 Cave, Prehistoric, Discovery of, in France, 456  
*Ceratodus*, Prof. Huxley, F.R.S., on, 196  
*Chatopoda*, Ehlers on the, 75  
 Challenger Expedition, 70, 76, 216, 272, 413, 435, 457, 478; Photography in the, Col. Stuart Wortley, 25; Reports, 250  
 "Chambers' Encyclopædia," 42  
 Channel Tunnel, W. Topley, 133  
 Chaumont (Dr. F. de), Dr. Richardson's Hygeia, 25  
 "Chemical Analysis," Prof. Dittmar's, 507  
 Chemical Society, 39, 79, 118, 158, 258, 298, 339, 399, 418, 499, 534; Journal of, 78, 176, 277, 378; Research Fund for the, Dr. W. J. Russell, F.R.S., 461; Visit to the Royal Arsenal, 395  
 Chemistry, Catechism of, 464; Dammer's Dictionary of, 483; Dr. Youmans' Class-book of, 424  
 Chemistry of the Non-metallic Elements, Procter, 446  
 Cherry Blossoms destroyed by Squirrels, F. H. Storer, 26  
 Cherry Laurel, Glands of the, 107, 150  
 Chicago Botanical Garden, 357  
 Children, Science teaching to, 48  
 China, Tufted Deer of, 334  
 Chinese Miners in Victoria, 256  
 Chisholm (H. W.), International Metric Commission at Paris, 452  
 Chloride of Silver Batteries, W. De la Rue, F.R.S., 277  
 Chlorides, Prof. T. E. Thorpe on the Specific Volumes of Inorganic, 397  
 Cholera and Meteorology, 340  
 Christy and Lartet, "Reliquie Aquitanice," 401  
 Chronoscope, a new form of, 139  
 Cinchona in India, 196  
 Circle, the Secret of the, Alick Carrick, 323  
 "Circular Notes," J. F. Campbell, 481  
 Cirrus Cloud, Forms for Observing, 7  
 Citric and Tartaric Acids, 78  
 City Companies, Mr. Gladstone on the, 42  
 Clifton College Scientific Society, 236  
 Climatic Characteristics of Winds as dependent on their Origin, 520  
 Climbing Plants, Darwin on, 65  
 "Close Time" for Indigenous Animals, 315  
 "Clouds in the East," Valentine Baker, 484  
 Clouds, Genesis of, 107  
 Clover and Bees, Thomas Belt, 26

- Cobbold (Dr. T. S., F.R.S.), Sutton's Report on Trichinosis, 105; Van Beneden's "Animal Parasites," 303  
 Coffee, Cultivation of, in India, 175; in Dominica, 38, 187  
 Coggia's Comet, 151  
 Collomia, Dr. Asa Gray, 85  
 Colorado, Map of, 414  
 Colour in Flowers, 150, 129, 348, 366, 427, 465  
 Coloured Solar Halos, 466  
 Comets, 486; of 1729, 129; Coggia's, 151; of 1702, 168; Encke's, 188; of 1874 and 1680, 208; Olbers' of 1815, 348; Biela's, 368; of 1840, 386; D'Arrest's, 428; A Southern (?), 449  
 Compass, Mr. Casella's New, 135  
 Compressed Air Locomotives, 489  
 Compulsory Education, Dr. Lyon Playfair on, 35  
 Condensed Air Tramways, 228  
 "Congo and Gorilla Land," R. F. Burton's, 123  
 Congo, the River, Monteiro's Angola and, 161  
 Conia, Properties of, 300  
 Conic Sections, W. H. Besant's, 24  
 Continued Fractions, Early History of, Thomas Muir, 448  
 Cook (A. J.), "Injurious Insects of Michigan," 424  
 Cooke (Josiah P.), "Scientific Culture, 284  
 Copenhagen, Meteorology of, 197  
 Coral Sand, the Formation of, 510  
 Corn, Sunspots and the Price of, 15  
 Cornu (M.), Experiments on Light, 112  
 "Cosmos," 114, 155, 530  
 Costerus (J. C.), Seasonal Order of Colour in Flowers, 427  
 Crab, H. Woodward, F.R.S., on a New Fossil, 58  
 Creation, Prof. Haeckel's History of, 121  
 Creswell Crag, Bone-Caves of the, 534  
 Croll (James), Oceanic Circulation, 66  
 Crookes (W., F.R.S.), Award of Royal Society Medal to, 34; Radiometers, 458, 489; Repulsion and Radiation, 391, 459  
 Crova (M.), Apparatus for Demonstrating the Transformation of Force, 434  
 Crystal Palace School of Engineering, 36  
 Cuckoo, First Heard, 475  
 Cumming (Linnaeus), Physical Science in Schools, 330  
 Curley (E. A.), Nebraska, 7  
 Curve-Tracing, Works on, 483  
 Cyclometers and other Paradoxes, Part II., 28  
 Cyclones, 386; in Mauritius, 456  
 D'Alberty (Sig.), Discoveries in New Guinea, 154, 435  
 Dall (W. H.), Mountains of Alaska, 53  
 Damman's Race-Photographs, E. B. Tylor, F.R.S., 184  
 Dammer (Dr.), "Kurzes Chemisches Handwörterbuch," 483  
 D'Arrest's Comet, 428  
 Darwin (C., F.R.S.), on Climbing Plants, 65; Theory of Pangenesis, 333  
 Darwin (Francis), Vivisection, 385  
 Dasent (Rev. M.), Migration of Species, 367  
 Davenport (S. T.), Death of, 216  
 Davis Straits, New Harbour near, 54  
 Dawkins (Prof. Boyd, F.R.S.), Plagiarism of Map, 7, 26  
 Day (Francis), Collection of Indian Fishes, 334  
 Deep-sea Telegraphs: How they are Tested, 517  
 Deer, the Tufted, of China, 334  
 De la Rue (W., F.R.S.), Chloride of Silver Batteries, 277  
 Denning (W. F.), Large Meteors, 287; Meteor in the Daytime, 207  
 Derby (Lord) on the Endowment of Scientific Research, 141  
 Der Naturforscher, 533  
 Deutsche Seewarte, 375  
 Devon and Cornwall, the Drift of, 58  
 Diagrams, Agricultural, 36  
 Diarrhoea, Registrar-General on Infantile, 35; Report on the Epidemic of, in Leicester, 273  
 Didot (M.), Death of, 358  
 "Difference Engine, the," 215  
 Dinocerata, Prof. Marsh on the, 374  
 Dinosaurian Vertebrae, Prof. R. Owen, F.R.S., 99  
 "Discoveries and Inventions of the Nineteenth Century," by R. Routledge, F.C.S., 45  
 "Diseases of Modern Life," Dr. Richardson's, 508  
 Dittmar (Prof. W.), "Qualitative Chemical Analysis," 507  
 Dixon (W. Hepworth), "White Conquest," 23  
 D-line Spectra, Major W. A. Ross, 366; Prof. G. G. Stokes, F.R.S., 247  
 Dominica, Coffee in, 38, 187  
 Dodel (Arnold), "Die Neuere Schöpfungsgeschichte," 265  
 Dog, a Criminal, R. S. Culley, 66; Retriever, and Cat, 36  
 Dohrn (Dr.), Cambridge Students at his Zoological Station, 113  
 Donati, Proposed Monument to, 455  
 Donkey, a Relapsed, Prof. E. Bonavia, 486  
 Double Stars, 449; Rugby Catalogue of, 287  
 Drasche (Dr.), on the Philippine Islands, 435  
 Dresden, the, "Gorilla," Dr. A. B. Meyer, 106  
 Dresden Zoological Museum, 464  
 Drinking Water, Organic Impurities of, Prof. Frankland, F.R.S., 330  
 Dublin, Professorships at Trinity College, 15; Royal Irish Academy, 100; Scientific Societies, 470; Duncan (Prof. P. Martin, F.R.S.), the Animal of Millepora, 465  
 Dundee Free Library, Report of, 175  
 Dunraven (Earl of), "The Great Divide," 264  
 "Dyeing and Calico Printing," Dr. F. Crace-Calvert; R. Meldola, 283  
 Dyer (Prof. W. T.), Seasonal Order of Colour in Flowers, 348  
 Earth, J. Willis on the Internal Heat of the, 8  
 Earthquakes, in Algiers, 135, 457; in Algeria, 274, 375; at Berne, 475; in Bombay, 135; at Gisborne, New Zealand, 95; at Lyons, 114; in North Carolina, 94; Porto Rico, 155; in Peru, 274; in United States, 236  
 Earth's Age, Prof. Tait on the, 486  
 Earth's Magnetism and the Sun's rotation, 466  
 Earth's Magnetism, Effects of the Sun's Rotation and the Moon's Revolution on the, J. Allan Brown, F.R.S., 328  
 East Anglia, Physical Geography of, during the Glacial Period, 198  
 Eastbourne, Natural History Society, 155  
 Easter, to find, 487  
 Easter Sunday, date of, 315, 326  
 Ecker (Dr. A.), on the Character of the Hand, 8  
 Eclipse, the Late, Dr. A. Schuster, 86, 207  
 Eclipses, Solar, of 1605, 108; Solar, of 1999, 169; Solar, of March 25, 1876, 248; Total Solar, of 1876, 268; Solar, of 1706, 307; Solar, of 1883, 406  
 Eden (Chas. H.), Australian Heroes, 323  
 Edinburgh, Royal Observatory at, 45; Royal Society, 77, 340; Scottish Meteorological Society, 100  
 Education, Dr. Lyon Playfair on Compulsory, 35; in Holland, 528; Science in, 48  
 Eels, Tenacity of Life in, 531  
 Egypt and the Nile, 43  
 Ehlers on the *Chatopoda*, 75  
 Electric Lamps, 414  
 Electrical Appliances, Exhibition of, in Paris, 54  
 Electrical Induction, Experimental Researches in, Prof. Volpicelli, 437, 475  
 Electricity, the flow of, in a plate, 459; Lighting by, 256  
 Electro-Magnetic Rotation, Experiment on, W. Spottiswoode, F.R.S., 498  
 Electrodes, Polarisation of, 298  
 Ellery (Prof.), Meteorology of Australia, 196  
 Encke's Comet, 188  
 "Encyclopædia Britannica," vol. iii., Prof. A. H. Garrod, 221; the Article "Birds" in, Prof. A. H. Garrod, 266; Prof. Huxley, F.R.S., 247; Prof. Newton, F.R.S., 186  
 Endowment of Scientific Research, Lord Derby, 141  
 Engel's "Musical Instruments at South Kensington," 443  
 Entomological Society, 79, 140, 219, 340, 419, 536  
 Eosin, Action of, on the Photographic Spectrum, 255  
 Ericsson (Capt. J.), Thermal Energy and Radiation, 114; Thermal Energy from the Solar Surface, 224  
 Ericsson's Researches on the Sun, P. A. Secchi, 46  
 Eskimo, Dr. Rink's Tales and Traditions of, 103  
*Eucalyptus Globulus*, 117  
 "Euclid Simplified," J. R. Morell's, 202, 405, 427  
 Evans (J., F.R.S.), Anniversary Address at the Geological Society, 354, 376; Water Supply of the Metropolis, 425  
 Everett (Prof. J. D.), Prof. Tait on the Earth's Age, 486  
 Evers' (Dr. H.), "Mathematical Tables," 494  
 Examinations, School, and the University of London, 286  
 Exhibition of Scientific Apparatus at South Kensington, 36, 196, 231, 274, 295, 315, 349, 375, 413, 503

- Fatigue, the Law of, Dr. S. Haughton, F.R.S., 98  
 Faye on the Laws of Storms, 11, 87, 187  
 Fertilisation of Flowers by Insects, Hermann Müller, XII., 210; XIII., 289  
 Fertilisation, Plant, 427  
 "Fifteen Young Ladies Problem," 57  
 Finsch (Dr. Otto), Birds of the Pelew Islands, 152  
 Fire-Damp, Explosions from, E. W. Binney, F.R.S., 219  
 Firework Paper, Japanese, 236  
 Fish, Exhibition of, in United States, 217  
 Fish, Rapid Growth of, Robert U. S. Mitchell, 107  
 Fish-pigment, Spectrum of, 167  
 Fisheries of Norfolk, Report on, 114  
 Fishes of India, Mr. F. Day's Collection, 334  
 Fishes, Prof. Van Siebold's work on Freshwater, 366  
 Flame of Common Salt, T. N. Müller, 448  
 Flight of Birds, 324  
 Flint Skin-scrapers from New Jersey, Dr. Charles C. Abbott, 270  
 Floods in France, 197; in Somersetshire, 155  
 Flower (Prof. F.R.S.), a New Cetacean from New Zealand, 149; the Relation of Extinct to Existing Mammalia, 296, 307, 327, 350, 387, 409, 449, 487, 513; the Uintatherium, 404  
 Flowering of Spring Plants, Alex. Buchan, 249  
 Flowers and Bees, Dr. Müller, 10  
 Flowers, Colour of, Grown in the Dark, H. C. Sorby, F.R.S., 465  
 Flowers, Fertilisation of, by Insects, H. Müller, XII., 210, XIII., 289  
 Flowers, Seasonal Order of Colour in, 129, 150, 326, 348, 366, 427  
*Föhn* Storms in Switzerland, 218, 440  
 Food, Dr. Hassall's work on, 345, 396  
 Forbes (Prof. George), Notes from Siberia, 469  
 Force, M. Crova's Apparatus for Demonstrating the Transformation of, 434  
 Forestry, C. F. Amery's Notes on, 6  
 Forrest (J.), Explorations in Australia, 83  
 Forster (W. E., M.P.), on Science, 456  
 "Fossil Butterflies," S. H. Scudder, 222  
 Fossil Flora of North America, 95  
 Fossil Horse of Buenos Ayres, Dr. Burmeister on, 53  
 Fossil Skeletons of Le Puy en Velay, 207  
 Foster (Prof. G. C.), a New Form of Chronoscope, 139  
 Fractions, Estimation of, 127  
 France: Ancient Glacial Action in, 67, 404, 425; Floods in, 197; Geographical Society, 77, 174, 357, 473; Geographical Society's Bulletin, 16, 297; Glaciers in Central, 149, 166; Dr. J. D. Hooker on Glaciers in; Maps at Railways, 77; Meteorology in, 356; Meteorology Stations in, 336; New Maps of, 335; National Library, 77; G. Poulett Scrope, F.R.S., on Glaciers in, 149, 166; Physical Society, 280; Society of Aerial Navigation, 113; *see also* Paris  
 Francis (George), Spectrum of Fish-pigment, 167  
 Frankland (Dr. E., F.R.S.), Coloured Solar Halos, 404; how Typhoid Fever is Spread, 447; Organic Impurities of Drinking Water, 330; Water Supply of the Metropolis, 392  
 French Experimental Physiology, 44, 182  
 Freshwater Fishes of England, Prof. Van Siebold's Work on, 366  
 Friction between Water and Air, Dr. Ritter von Lang on, 533  
 "From Vineyard to Decanter," 217  
 Frost (Percival) "Treatise on Curve Tracing," 483  
 Froude (Wm., F.R.S.), "Stream Lines" in Relation to the Resistance of Ships, 50, 89, 130, 169  
 Fungus and House-fly, 168  
 Fusinieri, the Discoveries of, G. Nardi, 111  
 Gabb (Dr. W. M.), Exploration of Costa Rica, 257  
 Galabin (Dr. A. L.), Modified Cardiograph, 471  
 Gallium, on some Properties of, 136  
 Galton (F., F.R.S.), Heredity, 59  
 Galton (J. C.), a New Palmistry, 8, 47, 68, 87; Protective Resemblance in the Sloths, 187  
 Galvanic Currents, the, 452  
 Galvanometer, a New, 379  
 Gamond (M. Thomé de), death of, 335  
 Garrod (Prof. A. H.), "Encyclopædia Britannica," vol. iii., 221; the Article "Birds" in "Encyclopædia Britannica," 226  
 Gautier (Col.), Meteorology in Labrador, 60  
 "Gegenschein" of the Zodiacal Light, 129  
 Geikie (Prof. A., F.R.S.), American Surveys, 1; Old Red Sandstone, 389  
 Geissler Tubes and Aurora Borealis, 237; the Spectrum of Nitrogen and that of Alkaline Metals in, 314  
 Geneva: International Medical Congress at, 77; Physical and Natural History Society, 60, 120, 280, 400  
 Geographical Magazine, 114, 297, 376  
 Geographical Society, 52, 93, 134, 256, 315, 357, 397, 473  
 Geographical Society of France, 155, 174, 357; Bulletin, 297  
 Geographical Society of Italy, 136  
 Geographical Zoology, P. L. Sclater, F.R.S., 482  
 Geological Map of Australia, 352  
 Geological Record for 1874; W. Whitaker, 322  
 Geological Sketches; L. Agassiz, 383  
 Geological Society, 57, 99, 139, 198, 238, 278, 339, 358, 379, 439, 479, 534; Anniversary Address, 354, 376; Medal of, 295; New Museum of, 227  
 Geological Society, Vienna, 220, 319  
 Geological Survey of the United States, 156, 314  
 Geological Time, Prof. McKenny Hughes on, 435  
 "Geologie der Kohlenlager," Dr. H. Mietzsch, 166  
 Geologists' Association, 159, 258, 318, 459  
 Geology, Abyssinian, 137; American Geological Surveys by Prof. A. Geikie, 1; Survey of United States, 356; U. S. Survey Publications, 385  
 "Geology for Students," Prof. A. H. Green's, 505  
 Geometry, Burchett's Practical Plane, 223; French Works on, 509; the New, 102  
 Germany: Association of Natural Philosophers, &c., 32; German Chemical Society, 80, 119, 178, 289, 319, 360; Commission on Arctic Exploration, 34, 73; Germany and the Loan Exhibition of Scientific Apparatus, 470; German North Sea Commission, 125; Science in, 10, 30, 75, 112, 250, 452, 521; Scientific and Medical Association, 56  
 Germs, Prof. Tyndall on, 252, 268, 324, 347; Dr. H. Charlton Bastian, F.R.S., 284, 285  
 Gerst (R.), Physical Science in Schools, 430  
 Glacial Action in Central France, W. S. Symonds, 67  
 Glacial Coal-beds of Switzerland, Traces of Man in, 130  
 Glacial Period, Physical Geography of East Anglia during the, 198  
 Glaciers, in California, 180; Evidence of, in Central France, 31, 149, 166, 404, 425  
 Gladstone (Mr.), at Greenwich, 41  
 Gladstone (Dr. J. H., F.R.S.), on the Replacement of Electropositive by Electro-negative Metals in a Voltaic Cell, 118  
 Glands of the Cherry Laurel, G. S. Boulger, 107  
 Glover (J. P.), Australian Implement, 27  
 Glow-worm in Scotland, 188, 208  
 Godwin-Austen (H. H.), Dr. Stoliczka's Collection of Mammals, 106, 109  
 Gold Coast, M. Bonnat's Exploration of, 94  
 Goodenough (Commodore), Memoir of, C. R. Markham, 185  
 Gore (G., F.R.S.), Bar Magnets and Conducting Wires, 176  
 "Gorilla Land and the Congo," R. F. Burton, 123  
 Gorilla, the Dresden, Dr. A. B. Meyer, 106  
 Gould's "Birds of New Guinea," 15  
 Gould (John, F.R.S.), "A Monograph of the Trogonidae," 166  
 Granitic Rocks of the Lake District, 139  
 Gratz, German Association at, 32  
 Gray (Dr. Asa), Collomia, 85  
 "Great Divide, the," Earl of Dunraven, 264  
 Green (Prof. A. H.), "Geology for Students and General Readers," 505  
 Greenland, Dr. Rink on, 103  
 "Greenstones" of Cornwall, 379  
 Gresham College, 273  
 Grieve (G. J. P.), Further Linkage Work, 69  
 Grimm (Oscar), Fauna of the Caspian Sea, 74  
 Grohman (W. A. B.), Tyrol and the Tyrolese, 206  
 Guillemin's "Le Ciel," 494  
 Gum Arabic, 117  
 Guthrie (Prof.), Stationary Liquid Waves, 99; "Magnetism and Electricity," 261  
 Hadden (A.), a New Galvanometer, 379  
 Haeckel (Prof.), "History of Creation," 121; on Universities, 135



- Hæmoglobin, H. C. Sorby, F.R.S., on the Evolution of, 306  
 Halos, Coloured Solar, 404, 426, 466, 512  
 Hamburg Naval Observatory, 217  
 Hanbury (Daniel), Proposed Memorial to, 455  
*Harpyopsis Novæ Guinæe*, 134  
 Harris (G., LL.D.), Calligraphy as a Test of Character, 77  
 Hartley (W. N.), Physical Science in Schools, 413; "Air and its Relation to Life," 243  
 "Haskell Portfolio," 175  
 Hassall (Dr.), "On Food," 345, 396  
 Hastings, Science in, 217, 267, 306  
 Houghton (Dr. S., F.R.S.), the Law of Fatigue, 98  
 Havana, Meteorological Observations at, 224  
 Hayden (Prof.), Bulletin of the Survey of the United States, 414; Geological Survey of the United States, 1, 156, 314  
 "Health in the House," C. M. Buckton, 384  
 Heat of the Earth, J. Willis on the Internal, 8  
 Hector (Dr., F.R.S.), Geology of New Zealand, 258  
 Hemiptera, List of American, 376  
 Henry (Prof.), Smithsonian Report for 1874, 94  
 Hensley's Scholar's Algebra, 304  
 Henslow (Rev. George), Physical Science in Schools, 493  
 Hentz (N. M., M.D.), Arachnological Writings of, 281  
 Hepaticæ, Irish, 38  
 Hermann (Prof. D. L.), "Human Physiology," 22  
 Herring, the Migration of the, 100; Report of the Scotch Fishery Board on, 35  
 Herschel (Caroline), Memoir of, 361  
 Herwart's Multiplication Table, 40  
 Heuglin (Baron Th. von), Birds of North-Eastern Africa, 289  
 Hicks (George), Mechanical Action of Light, 347  
 Higgins (Rev. H. H.), the Boomerang, 168; Voyage to West Indies, 174  
 Himalayas, the Eastern, 246  
 Himalayas, Scientific Notes taken in the, Dr. A. Schuster, 393  
 Himalayas, A. Wilson's Journey in the Western, 4  
 Hinchliff (T. W.), "Over the Sea and Far Away," 509  
 Hinrichs (Dr. Gustavus), Meteor in Iowa, 113  
 "History of Creation," Prof. Hæckel's, 121  
 Hoffmeyer's Synoptic Weather Charts, 85  
 Hofmann (Prof., F.R.S.), Award of Royal Society Medal to, 34; Elected Associate of the Italian Society of Science, 235  
 Holland, Middle-Class Education in, 528  
 Holten (Prof. C.), Meteorological Tables, 197  
 Honolulu, Microscopic Club at, 256  
 Hooker (Dr. J. D., P.R.S.), Ancient Glaciers in France, 31  
 Hopkins University, U.S., 412  
 Horrocks (Jeremiah), Memorial of, 112  
 Horses, Case of Intelligence in, 36  
 Horticultural Exhibition at Amsterdam, 135  
 Horticulture in Belgium, 95  
 Houghton (Rev. W.), "Sketches of British Insects," 365  
 House-fly and Fungus, 168  
 Hubrecht (Dr. A. A. W.), Exploration of Sumatra, 209  
 Huddersfield Naturalists' Society, 136  
 Hughes (Prof. McKenny), Geological Time, 435  
 "Human Physiology," Dr. Hermann's, 22  
 Hunterian Lectures, Prof. Flower's, 307, 327, 350, 1387, 409, 449, 487, 513  
 Hurricane in Manila, 175  
 Hutchinson (T. N.), Physical Science in Schools, 353; radiometers, 324  
 Hutchinson (T. J.), Summer Holidays in Brittany, 465  
 Huxley (Prof., F.R.S.), the Article "Birds" in the "Encyclopædia Britannica," 247; on *Ceratodus*, 196; Geological Society's Wollaston Medal, 295; Origin of Vertebrate Animals, 388, 410, 429, 467, 514  
 Hygeia, Dr. Richardson's, 25  
 Hymenopterous Insects, Ocelli of, Dr. Hermann Müller, 167  
 Hyperion, the Saturnian Satellite, 326  
 Ice Machine, Raoul Pictet's Sulphurous Acid, 432  
 Iceland, Volcanic Eruptions in, 135; Meteorology in, 493  
 India, Cultivation of Coffee and Tea in, 175  
 India, Maps of, 54, 95, 413  
 "Indian Alps and how we crossed them," by a Lady Pioneer, 246  
 Indian Fishes, Mr. F. Day's Collection, 334  
 Indiana and Kentucky, Archaeological Researches in, 109  
 Industrial Applications of Oxygen, 293, 336  
 Ingleby (Dr. C. M.), Floating Radiometers, 511  
 Insects, Houghton's Sketches of British, 365; the Ocelli in, 406  
 Insects of Michigan, A. J. Cook's Injurious, 424  
 Institute of Civil Engineers, 279, 319, 340, 358, 399, 440  
 International Bulletin, 273  
 International Medical Congress, 77  
 International Metric Commission in Paris, H. W. Chisholm, 452  
 Inundations in France, 197  
 "Inventions and Discoveries of the Nineteenth Century," by R. Routledge, 45  
 Iowa, Meteor in, 113; Physical Observatory at, 316; Iowa Weather Report, 197, 316  
 Ireland, Science and Art in, 309, 349, 370  
 Ireland, Science Commission Report on the Queen's Colleges, 22  
 Irish Academy, 100, 255, 297, 414  
 Irish Hepaticæ, 38  
 Iron and Steel Institute, 77  
 Italian Expedition to Africa, 77, 155  
 Italy, Geographical Society, 136, 375; Meteorological Congress, 356; Meteorology of, 436; Science in, 110  
 Jackson (J. R.), Laslett's "Timber and Timber Trees," 181  
 Jahrbuch der k. k. Geologischen Reichsanstalt, 176  
 Jahrbucher für Wissenschaftliche Botanik, 156, 533  
 Japanese "Firework Paper," 236  
 Jenesai, Prof. Nordenskjöld on the, 95, 275, 312  
 Jenkins (B. G.), Extraordinary Tides, 69  
 Jersey, Subsidence of Parts of, 238  
 Jevons (Prof. S., F.R.S.), Sunspots and the Price of Corn, 15  
 Johnston's (W. and A. K.) Map of India, 54  
 Jones (Prof. Rupert, F.R.S.) on Quartz and other Forms of Silica, 159  
 Journal of Anatomy and Physiology, 237, 532  
 Journal of Botany, 155  
 Journal of the Chemical Society, 78, 176, 277, 378, 477  
 Journal Géographique Internationale, 376  
 Journal d'Hygiène, 255  
 Journal of Mental Science, 196  
 Journal de Physique, 157, 237, 418  
 Jungken (Prof.), Scientific Collections of, 155  
 Jupiter's Satellites, 288  
 Kansas City, U.S., Academy of Science at, 493  
 Kent (Saville) appointed to Yarmouth Aquarium, 77; Guide-book to the Manchester Aquarium, 85  
 Kent's Cave, Eleventh Report of Committee for Exploring, 17  
 Kentucky and Indiana, Archaeological Researches in, 109  
 Kerner (Prof.), on the Auricula, 94; Hybrid Primulacæ of the Alps, 113  
 Kesslerloch, Merk's Excavations at the, 401  
 Kiddle (Capt. W. W.), the Effect of Waves, 108  
 Kingdoms of Nature, the Three, 367, 386  
 Kjellman (Dr. F. R.), Swedish Arctic Expedition, 116  
 Klein (E., F.R.S.), Small-pox of Sheep, 467  
*Labyrinthodentia*, 479  
 Lake District, the Granitic Rocks of, 139  
 Lamont (James, F.G.S.), Yachting in the Arctic Seas, 264  
 Lang (Dr. Rutter von) on the Friction between Water and Air, 533  
 Lange (Prof. F. A.), Death of, 94  
 Lankester (E. Ray, F.R.S.), Dr. Bastian and Prof. Tyndall on Germs, 324; Prof. von Siebold's Fresh-water Fishes of England, 366; Translation of Hæckel's "History of Creation," 121  
 Lartet and Christy, "Reliquiæ Aquitanicæ," 401  
 Lasaulx (Prof. A. von), Ancient Glaciers in France, 404  
 Laslett's "Timber and Timber Trees," J. R. Jackson, 181  
 Lateau (Louise), the Case of, 95  
 Law of Storms, Faye on the, 11, 87, 187; J. J. Murphy, 187  
 Lawes (J. B., F.R.S.), his Experiments in Farming, 101  
 Leared (Dr. A.), "Morocco and the Moors," 206  
 Leeds, Science in, 527  
 Leicester, Report on the Epidemic of Diarrhoea, 237  
 Lesquereux (Léon.), Fossil Flora of North America, 95  
 Letourneau's "Biologie," 404  
 Leverrier (M.) at Astronomical Society, 314; on Weather Forecasts, 296  
 Lichens, the True Nature of, Dr. Lauder Lindsay, 168, 247

- Light, Lommel's Nature of, 62  
 Light, Mechanical Action of, 347  
 "Light Mills," Dr. Geisler's, 479  
 Lightning-conductors, 357, 494  
 Lightning on Trees, Effects of, 120  
 Lindsay (Dr. W. Lauder), the True Nature of Lichens, 247  
 Linen and Caterpillars, 54  
 Linkages, 69  
 Linnæan Society, 39, 98, 112, 118, 134, 178, 298, 317, 359, 418, 458, 499; Transactions, 216  
 Lion, Remains of a British Species of, 396  
 Lippich (M.), the Luminiferous Ether, 494  
 Lisbon Academy of Science, 296  
 Lisbon Magnetic Observations, 301, 448  
 Liverpool Naturalists' Field Club, 16  
 Livingstone's African Expeditions, 197  
 Loan Exhibition of Scientific Apparatus, 36, 196, 231, 274, 295, 315, 349, 375, 413, 455, 470, 474, 503  
 Lockyer (J. Norman, F.R.S.), Recent Methods of Spectroscopy, 239  
 Locomotives, Compressed Air, 489  
 Lodge (O. J.), the Flow of Electricity in a Plate, 459  
 Lohse (Dr. O.), Bothkamp Sun Observations, 402  
 Lommel's "Nature of Light," 62; Optics, 87  
 Lorrain (Dr.), Death of, 16  
 Loudon's "Algebra for Beginners," 404  
 Lubbock (Sir J., F.R.S.), Bees, Wasps, and Ants, 37; on Ants, 359  
 Luminiferous Ether, the, 494
- Macleay's Expedition to New Guinea, 94, 153  
 M'Nab (Prof.) on *Penicillium glaucum*, 36; Pfeffer's "Periodic Movements of Leaf-organs," 24  
 Macrurous Crustacea, some new, 57  
 Madagascar, Dr. Hartlaub's work on the Birds of, 272; Natural History, 308  
 Magnetic Observations at Lisbon, 301, 448  
 "Magnetism and Electricity," Dr. Guthrie's, 261  
 Magnetism, the Early History of, 523  
 Magnus (P.), School Examinations and the University of London, 286  
 "Maladies which are special to Mystics," 95  
 Mallett (R.), Prismatic Basalt, 7  
 Mammalia, Prof. Flower's Hunterian Lectures on the 307, 327, 350, 387, 409, 449, 487, 513  
 Mammals of Yarkand, 109  
 Man, Traces of, in the Glacial Coal-beds of Switzerland, 130  
 Manchester Aquarium, additions to, 77; Saville Kent's Guide-book to, 85; Literary and Philosophical Society, 118, 178, 219, 259, 399; Science Lectures, 82; Scientific Students' Association, 40  
 "Mandalay to Momen," Dr. J. Anderson, 422  
 Manilla, Hurricane in, 175  
 Maoris of New Zealand, 239  
 Map-drawing, C. Bird's Twelve Maps for, 7  
 Maps, at French Railway Stations, 77; of India, Catalogue of, 413; Stanford's Orographical, 396  
 Marey's "Physiologie Experimentale," 144, 182  
 Marine Algae of the United States, 38  
 Marine Aquariums, 208  
 Markham (C. R.), Memoir of Commodore Goodenough, 185  
 Marine Deposits, A. Tylor, 199  
 Mars, the Equator of, 449  
 Marsden's "Numismata Orientalia," Part II., 302  
 Marsh (Prof. O. C.) on the Dinoceratæ, 374  
 Mason (Sir Josiah), College at Birmingham, 174  
 "Mass" and "Weight," the Use of the Words, 325, 385, 405, 446, 466, 484  
 Matches, Safety, 208, 469, 512  
 Mathematical Science, C. Pine's Further Researches in, 6  
 Mathematical Society, 57, 138, 238, 317, 399, 534  
 Mathematical Tables, Dr. H. Evers, 494  
 Maxwell (Prof. Clerk, F.R.S.), Tait's "Recent Advances in Physical Science," 461  
 Mayo (Earl of), Sport in Abyssinia, 384  
 Mechanical Action of Light, 347  
 Medical, International, Congress, 77  
 Meduse, Abnormal Multiplication and Abortion of Parts in, G. J. Romanes, 496
- Melbourne, The Observatory, 173; Rocks and Minerals in the Museum at, 165  
 Melde (Dr. Franz), Theorie und Praxis der Astronomischen Zeitbestimmung, 88  
 Meldola (R.), Crace-Calvert's Dyeing and Calico-printing, 283; Tissandier's Photography, 204  
 Memorie della Società degli Spettroscopisti Italiani, 137, 497  
 Mercury, the Visibility of, 427  
 Merk (Conrad), Excavations at the Kesslerloch, 401  
 Metachromism, 298, 347, 385, 426, 467  
 Meteors, 113, 187, 207, 287, 467  
 Meteorolite at Wolverhampton, 531  
 Meteorological Congress at Poitiers, 94  
 Meteorological Society, 79, 158, 279, 340, 440, 536; Journal of the, 436, 531  
 Meteorological Society of Paris, 196  
 Meteorological Society of Scotland, 100, 135  
 Meteorological Stations in France, 336  
 Meteorology, Algerian, 217; Atlas Météorologique de l'Observatoire de Paris, 375; in Baden, 25; of Bengal, W. G. Willson, 66; Bulletin of the Pyrénées-Orientales, 113; Charts of the United States, 53; Congress in Italy, 356; Congress at Poitiers, 35; of Copenhagen, 197; in France, 356; at Havana, 224; Dr. Hellmann on Atmospheric Strata, 137; Hoffmeyer's Synoptic Weather Charts, 85; in Iceland, 493; in India, 340; Italian, 436; Italian Commission, 234; M. Leverrier on Weather Forecasts, 296; New Office of, in Paris, 54; of Norway, 154; "Notizblatt der Vereine," 136; Observatories, 413; Poitiers Congress, 77; in the Pyrenees, 135; the Rainfall of India, 86; Weather Maps of the U.S., 95; Weather Reports of the U.S., 397  
 Metric Commission at Paris, H. W. Chisholm, 452  
 Mexico, New, Lieut. Wheeler's Expedition to, 76  
 Meyer (Dr. A. B.), the Dresden "Gorilla," 106; Saw-fish inhabiting Fresh Water, 167  
 Michelet (Jules), "The Sea," 106  
 Michigan, A. J. Cook's Injurious Insects of, 424  
 Michigan State Medical Society, Transactions of, 35  
 Microscope and Molecules of Matter, Relation between, H. C. Sorby, F.R.S., 332  
 Microscopical Science, Quarterly Journal of, 257  
 Microscopical Society, 39, 118, 159, 219, 299, 384, 399, 499  
 Microscopy, American Journal of, 297  
 Middle-class Education in Holland, 528  
 Mietzsch (Dr. H.), "Geologie der Kohlenlager," 166  
 Migration of Species, Rev. M. Dasent, 367  
 Millepora, the Animal of, Prof. Martin Duncan, F.R.S., 465  
 Miller (Mrs. Hugh), Death of, 414  
 Millington (Sir Thomas) and the Sexuality of Plants, 85, 127, 166, 185  
 Miniature Physical Geography, 310  
 "Mind," 477  
 Mineralogical Society, 274, 357  
 Minerals, Collection of, in United States, 77  
 Minerals of New South Wales, 382  
 Minor Planets, 27, 47, 69, 87, 109, 150, 208, 227, 268, 307, 326, 349, 407, 513  
 Mirage in Upper Thibet, 67  
 Mist and its Cloud, A. Agassiz, 107  
 Mitchell (R. U. S.), Observations on Fish, 107  
 Moa Bones, Discovery of, in New Zealand, 273  
 Mohn (Prof.), Meteorology of Norway, 154  
 Mohr (E.), "Victoria Falls of Zambesi," 384  
 Molecules of Matter and Microscope, Relation between, H. C. Sorby, F.R.S., 332  
 Molluscs, Freshwater and Land, Prof. Nordenskjöld, 284  
 Momen and Mandalay, Dr. Anderson's Work on, 422  
 Mont Blanc, Ascent of, by a Lady, 315, 336; Temperature on, 296  
 Monteiro (J. J.), "Angola and the River Congo," 161  
 Montsouris Physical Observatory, 217, 255  
 Morell's "Euclid Simplified," 202, 405, 427  
 Moresby (Capt. J.), "New Guinea and Polynesia," 235, 363  
 Morocco and the Moors, Dr. A. Leared, 206  
 Morphologisches Jahrbuch, 20, 176  
 Mosso (Dr.), *Flethysmograph*, 336  
 Mott (F. T.), a New Palmsbury, 68  
 Muir (Thomas), Early History of Continued Fractions, 448  
 Muir (M. M. Pattison), Routledge's "Discoveries and Inventions," 45; Dr. Youman's "Class-book of Chemistry," 424

- Müller (Dr. Hermann), Bees and Flowers, 10; Fertilisation of Flowers by Insects, XII., 210; XIII., 289; Ocelli of Hymenopterous Insects, 167  
 Müller (Fritz), Brazil Kitchen Mildens, Habits of Ants, 304  
 Müller (J. J.), the Luminiferous Ether, 494  
 Müller (Prof. Max) at Oxford, 112, 335  
 Müller (T. N.), Flame of Common Salt, 448  
 Munro (J.), the Formation of Coral Sand, 510  
 Murphy (J. J.), Law of Storms, 187; Physical Constitution of Steam, 466  
 Musical Instruments at South Kensington, 443  
 Musical Intervals, Dr. Wm. Pole's Method of representing, 116  
 Musical Pipes, Hermann Smith on, 511  
 Music, Beats in, Dr. Wm. Pole, F.R.S., 212, 232
- Nachtigal (Dr.), Medal awarded to, 456  
 Naples, Cambridge Students at the Zoological Station, 113  
 Nardi (Sig. G.), the Discoveries of Fusinieri, 111  
 Natural Science, Miss Buckley's History of, 343  
 Naturforscher, Der, 97, 198, 317  
 Nebraska, E. A. Curley on, 7  
 Neesen (Herr) on Mr. Crookes' Radiometer, 10  
 Nesbit (H. A.), University of London and School Examinations, 286  
 New Guinea, Baxter River, 76, 134; Beccari's Exploration of, 356; Botany of, 316; Capt. Moresby work on, 235, 363; D'Alberty's Discoveries in, 154, 435; Discovery of a New Rapacious Bird in, 134; Interior of, 397; Rev. S. Macfarlane's Travels in, 415; Macleay's Expedition to, 94; Voyage of the *Chevert* to, 153  
 "New Guinea and Polynesia," Capt. J. Moresby, 363  
 New Mexico, Lieut. Wheeler's Expedition to, 76  
 New South Wales, Minerals of, 382; Royal Society of, 78  
 New York Lyceum, change of name of, 531  
 New Zealand, Discovery of Moa Bones, 273; Dr. Hector, F.R.S., on the Geology of, 258; Inquest on a Skeleton, 196; Prof. Flower, F.R.S., on a New Cetacean from, 149; Salmon in, 256, 257; Volcanoes in, 135; Wellington Philosophical Society, 179  
 Newton (Prof. A., F.R.S.), Article "Birds" in "Encyclopædia Britannica," 186; Birds as Astronomical Objects, 447  
 Nile, the, Mr. A. Southworth's Journey up the, 43  
 Nitrogen, Spectrum of, and that of Alkaline Metals in Geissler Tubes, 314  
 Non-Metallic Elements, Chemistry of the, Dr. Procter, 446  
 Nordenskjöld (Prof.), on the Jenisei, 95, 275, 312  
 Norfolk, the Fisheries of, 114  
 Norfolk Naturalists' Society, 156  
 North America, Fossil Flora of, 95  
 North and Baltic Sea, Report on, 53  
 North Carolina Earthquakes, 94  
 North Sea Commission, the German, 125  
 Norway, Meteorology of, 154  
 Numerals, J. Allan Broun, F.R.S., on the Origin of, 47  
 "Numismata Orientalia," Marsden's, 302
- Obi Expedition, 315, 368  
 Observatories: Brussels, 254; Cincinnati, 357; Melbourne, 173; Paris, 229, 493; Pawlowsk, 97; Vienna, 192; at Iowa, 316; Montsouris, 255; Puy de Dôme, 273; on Pic du Midi, 251  
 "Observer of Nature," 531  
 Oceanic Circulation, James Croll, 66  
 Ocelli of Hymenopterous Insects, Dr. Hermann Müller, 167, 406  
 Oldham (Dr. Thomas, F.R.S.), award of Royal Society Medal to, 34  
 Old Red Sandstone, Prof. Geikie, F.R.S., 389  
 Oppenheim (Dr. A.), Association of German Natural Philosophers &c., 32; German Scientific and Medical Association, 56; Industrial Applications of Oxygen, 293, 336  
 Optical Barometer, Proposed, J. Stevenson, 150  
 Ordnance Survey, 197  
 Orientalists, Meeting of, in St. Petersburg, 76  
 Ornithological Collection, H. Seebohm's, 14  
 Ornithosauria, Prof. H. G. Seeley on, 98  
 "Over the Sea and Far Away," Hinchliff's, 509  
 Owen (Prof. R., F.R.S.), Dinosaurian Vertebrae, 99; Evidences of a Carnivorous Reptile, 339; on *Prorastomus Sorenoideus*, 114  
 Oxford Botanic Garden, 61, 94, 315; Johnson Memorial Prize, 256; Observatory, Visitors of, 54; Scholarships at Balliol College, 37; Science Lectures, 376; University Commission, 112, 434  
 Oxygen, the Industrial Applications of, 293, 336
- Palmistry, a New, 47, 68, 87  
 "Pandora" Expedition, 457  
 Pangenesis, Darwin's Theory of, 333  
 Papuans, Poisoned Arrows of, 235  
 Paris Academy, 20, 40, 60, 80, 100, 120, 140, 160, 175, 200, 220, 240, 260, 280, 300, 320, 360, 379, 400, 420, 440, 460, 480, 500, 530; Award of Prizes, 195; Physical Observatory, 235  
 Paris, Electric Lighting in, 256; Exhibition of Electrical Appliances, 54; Geographical Society, 155; National Library, 77; Observatory, 229, 493; Public Instruction in, 375; Railway Exhibition, 135; Steam-engines on Tramways, 77  
 Parker (Prof., F.R.S.) on Birds' Skulls, 178; Lectures at Royal College of Surgeons, 356; on the Woodpeckers and Wry-necks, 173  
 Parkes (Dr.), Obituary Notice of, 435  
 Paradoxes, among the Cyclometers and other, 28  
 Pasteur (L.), Prof. Tyndall on Germs, 305  
 Pawlowsk, Observatory at, 97  
 Pelew Islands, Birds of the, 152  
*Penicillium glaucum*, Prof. M'Nab on, 36  
 Penikese School, U.S., 89  
 Penning (W. H.), Physical Geography of East Anglia during the Glacial Period, 198  
 Périgord, Archaeology of, 401  
 Periodic Movements of Leaf-organs, Dr. Pfeffer, 24  
 Pesth, Water Supply of, 336  
 Petermann's Mittheilungen, 16, 76, 236, 297, 396, 401, 530  
 Petrie (W. M. Flinders), Estimation of Fractions, 127; Metachromism, 347, 426  
 Pfeffer (Prof. W.), "Die Periodischen Bewegungen der Blattorgane," 24  
 Pharmaceutical Conference, 136  
 Philadelphia, Museum at, 77; Academy of Natural Sciences, 299  
 Philippine Islands, 435  
 Photographic Society, 255  
 Photography in the *Challenger*, Col. Stuart Wortley, 25  
 Photography of the Red End of the Spectrum, Capt. W. de W. Abney, 432  
 Photography, Year Book of, 256; Photographic Almanac, 256  
 Photometer, a New, by Prof. J. Reynolds, 478  
 Physical Constitution of Steam, J. J. Murphy, 466  
 Physical Geography, Miniature, 310  
 Physical Observatories in France, 235; at Iowa, 316; Montsouris, 217; on the Pic du Midi, 251  
 Physical Science in Schools, 329, 353, 371, 386, 412, 430, 454, 472, 491  
 Physical Society, 59, 99, 139, 239, 298, 318, 379, 419, 459, 535  
 Physical Society of France, 280  
 Physiological Research, Proposed Society for, 455  
 Physiology, Dr. Hermann's Human, 22  
 Physiology, Recent French Experimental, 144, 182  
 Pic du Midi, Physical Observatory on the, 251  
 Pictet (M. Adolphe), Death of, 235  
 Pictet (Raoul), Sulphurous Acid Ice Machine, 432  
 Pine (C.), Researches in Mathematical Science, 6  
 Pirie's "Rigid Dynamics," 323  
 Planets, the Minor, 27, 47, 69, 87, 109, 151, 208, 227, 268, 307, 326, 349, 407, 513  
 Plant Fertilisation, 427  
 Plants, Darwin on Climbing, 65; the Flowering of Spring, Alex. Buchan, 249; Sir Thos. Millington and the Sexuality of, 166, 185; Sexuality of, 85, 127  
 Playfair (Dr. Lyon), on Compulsory Education, 35  
*Plethysmograph*, Dr. Mosso's, 336  
 Poggendorff's Annalen der Physik und Chemie, 38, 78, 317, 358, 497  
 Poisoned Arrows of the Papuans, 235  
 Poitiers Meteorological Congress, 77, 94  
 Pole (Dr. Wm., F.R.S.), Beats in Music, 212, 232; Method of Representing Musical Intervals, 116  
 Pollution of Rivers, Wm. Hope, 81  
 Polynesia and New Guinea, Capt. Moresby on, 363



- Poncelet (General) *Eloge* on, 196  
 Porto Rico, Earthquake in, 155  
 Potato Disease, 459; Worthington G. Smith on, 524  
 Pouchet's "Universe," 77  
 Preece (W. H.), Bryant and May's Matches, 208  
 "Preece and Sivewright's Telegraphy," 441, 511  
 Prehistoric Cave, Discovery of, in France, 456  
 Primroses and Bullfinches, 427  
 Primulaceae, Hybrid, of the Alps, 113  
 Pringsheim (Dr.), "Jahrbuch für Botanik," 156  
 Prismatic Basalt, 7, 47  
 Procter (W., M.D.), Chemistry of the Non-metallic Elements, 446  
 Proctor (R. A.), the Late Eclipse, 186  
 Procyon, Struve's Companion of, 406  
*Prorastomus sirenoides*, Prof. Owen, F.R.S., on, 114  
 Pryor (R. A.), a New Palmistry, 47; Seasonal Colour in Flowers, 150  
 Psychological Society, 77  
 Public Analysts, 242, 287  
 Puckle (Col. J.), the Rainfall,  
 Putnam's Archaeological Researches in Kentucky and Indiana, 109  
 Quarterly Journal of the Meteorological Society, 531  
 Quarterly Journal of Microscopical Science, 257  
 Queen's Colleges in Ireland, 22; Commission on, 530  
 Quetelet (Prof. E.), Statistics, Brussels, 296  
 Radiation and Repulsion, W. Crookes, F.R.S., 391, 450  
 Radiation and Thermal Energy, Capt. J. Ericsson, 114  
 Radiometers, 10, 324, 366, 420, 458, 473, 489, 511  
 Railway Exhibition in Paris, 135  
 Railway Stations in France, Maps at, 77  
 Rainbow Projected on Blue Sky, 348  
 Rainfall in 1875, 70, 86  
 Rainfall on the Continent, Decrease of, 15  
 Rainfall of Sweden, 436  
 Ramsay (Prof., F.R.S.), Anglesey, how it became an Island, 279  
 Rankine (Prof.), Memorial to, 374  
 Rare Plants in the Alps, Unequal Distribution of, 516  
 "Recent Origin of Man," J. S. Southall, 245, 484, 510  
 Red Snow, 414  
 Refraction, Apparatus for illustrating the Law of, 535  
 Refraction of Light and Sound through the Atmosphere, Dr. A. Schuster, 67  
 Refraction of Sound, Prof. Osborne Reynolds, 218  
*Reichert and Du Bois Reymond's Archiv*, 258  
 "Reliquie Aquitanice," Lartet and Christy, 401  
 Renshaw (A. G.), Screw-Propeller in Nature, 367  
 Reptilia and Batrachia of Costa Rica, 257  
 Repulsion and Radiation, W. Crookes, F.R.S., 391, 450  
 Research Fund for the Chemical Society, Dr. W. J. Russell, F.R.S., 461  
 Retriever Dog, and Cat, 36; a Criminal, 69  
 Revue Philosophique, 477  
 Reynolds (Prof. Osborne), Hartley's "Air and its Relation to Life," 243; Refraction of Sound, 218  
 Rhabdomyancy, Miss Buckland on, 200  
 Richardson (Dr., F.R.S.), Dr. F. de Chaumont on his Hygeia, 25; "Diseases of Modern Life," 508  
 Rink (Dr. Henry), "Tales and Traditions of the Eskimo," 103  
 River-beds of the Riviera, 406, 448  
 Rivers, Wm. Hope on the Pollution of, 81  
 Riviera, the Dry River-beds of the, 406, 448  
 Romanes (G. J.) on Medusæ, 496  
 Rome, Accademia dei Lincei, 536; Excavations at, 155; the University of, 114, 296  
 Roscoe (Prof., F.R.S.), on Popular Science Lectures, 82; Physical Science in Schools, 353, 386  
 Ross (Major W. A.), "Pyrology, or Fire Chemistry," 164; Blow-pipe Analysis, 186; D-line Spectra, 366  
 Rosse (Lord), Bronze Statue of, 435  
 Rotherham, Science Classes at, 135  
 Routledge (R., F.C.S.), "Discoveries and Inventions of the Nineteenth Century," 44  
 Royal Arsenal, Chemical Society at, 395  
 Royal Institution, Lectures at, 75  
 Royal School of Mines, Annual Dinner, 155  
 Royal Society, 78, 98, 118, 134, 138, 158, 176, 198, 218, 237, 277, 298, 397, 418, 458, 478, 498, 533; Anniversary Meeting, 93; Committees, 193; Conversazione, 473; Election of Officers and Council, 35; Medals of the, 34, 93; New Fellows, 474  
 Rogers (C. E. H.), Seasonal Order of Colour in Flowers, 129  
 Rugby Catalogue of Double Stars, 287  
 Russell (Dr. W. J., F.R.S.), a Research Fund for the Chemical Society, 461  
 Russia, Expedition to Behring's Straits, 217  
 Rüttimeyer on Traces of Man in the Glacial Coal-beds of Switzerland, 130  
 Safety Matches, 469, 512  
 St. Gothard's Tunnel Works, Compressed Air Locomotives used in, 489  
 St. Helena, the Natural History of, 272  
 St. Petersburg, Meeting of Orientalists, 76  
 Salet (M.), the Spectrum of Nitrogen and that of Alkaline Metals in Geissler Tubes, 314  
 Salmon, Investigation into the Habits of, 53; in New Zealand, 256, 257  
 Salt, the Flame of Common, 287, 306, 448  
 Satellites of Uranus, 208  
 Saturn, Occultations of, 188; Rings of, 307; Satellite Hyperion, 326  
 Saw-fish inhabiting Fresh Water, 107, 167  
 Scheerer and Blanford's "Introduction to the Use of the Mouth-Blowpipe, 164  
 School Examinations and the University of London, 261, 286  
 Schools, Physical Science in, 311, 329, 353, 371, 386, 412, 430, 454, 472, 491  
 Schott (Chas. A.), Meteorological Charts of the United States, 53  
 Schuster (Dr. A.), the Bothkamp Sun Observations, 402; the Flame of Common Salt, 306; the Late Eclipse, 86, 207; on the Radiometer, 458; Refraction of Light and Sound through the Atmosphere, 67; Scientific Notes taken in the Himalayas, 393  
 Schweinfurth (Dr. G.), "Artes Africanæ," 142  
 Science and Art in Ireland, 309, 349, 370  
 Science Classes and Penny Lectures in Birmingham, 149  
 Science Commission, Seventh Report of, 21  
 Science: in Germany, 10, 30, 75, 112, 250, 452, 521; in Italy, 110; in Leeds, 527  
 Science in Schools (*See* Schools)  
 Science Lectures at Manchester, 82  
 Science Teaching to Young Children, G. H. West, 48  
 Scientific Agriculture, Prof. T. Baldwin, 101  
 Scientific Apparatus, Loan Exhibition of, 36, 196, 231, 274, 295, 315, 349, 375, 413, 455, 470, 474, 503  
 "Scientific Culture," Josiah P. Cooke, 284  
 Scientific Instruction and the Advancement of Science, 371  
 Scientific Notes taken in the Himalayas, Dr. A. Schuster, 393  
 Scientific Research, Lord Derby on the Endowment of, 141  
 Scientific Research for the Promotion of Science, Prof. Piazzi Smith, 45  
 Scientific Societies of Dublin, 470  
 SCIENTIFIC WORTHIES, VII.—Sir Charles Wheatstone, 501  
 Sclater (P. L., F.R.S.), Geographical Zoology, 482; the Island of Socotra, 414, 426  
 Scorpion, H. Woodward, F.R.S., on a Fossil, 58  
 Scotland: Scotch Herring Fishery Board, Report of, 35; Scotch Universities, Science Commission, Report on, 21; Royal Agricultural Society, 101; Meteorological Society of, 53, 76, 100, 135  
 Scott (R. H., F.R.S.), Hoffmeyer's Synoptic Weather Charts, 85  
 Screw Propeller, Origin of, 367, 386, 428, 465, 512  
 Screws, Dr. Ball, F.R.S., on, 463  
 Scrope (G. Poulett, F.R.S.), Cup-shaped Joints in Prismatic Basalt, 47; Glaciers in France, 149, 166; Obituary Notice of, 241  
 Scudder (S. H.), Fossil Butterflies, 222  
 Sea, the, Jules Michelet, 106  
 Seasonal Order of Colour in Flowers, 150, 326, 348, 366, 427  
 Sea Trout on the Norfolk Coast, 114  
 Sea-water, the Expansion of, by Heat, 237  
 Secchi (Padre), Ericsson's Researches on the Sun, 46; Spectra of Stars, 480  
 Sedgwick Memorial, 375



- Seeböhm (H.), Ornithological Collection, 14  
 Seeley (Prof. H. G.), the Ornithosauria, 98  
 Selenium, Action of Light on, 238, 407, 419; Herr W. Siemens's Researches on, 112  
 Settle Cave Committee, Report of, 55  
 Sexuality of Plants and Sir Thomas Millington, 85, 127, 166, 185  
 Sheep, Small-pox of, E. Klein, F.R.S., 467  
 Siberia, Notes from, Prof. George Forbes, 469  
 Siberia, Northern, German Expedition to, 368  
 Siebold (Prof. von), Fresh-water Fishes of England, 366  
 Siemens (Dr. C. W., F.R.S.), the Action of Light on Selenium, 407; Bathometer, 431  
 Siemens (Herr W.), Researches on Selenium, 112  
 Silica, Prof. Rupert Jones, F.R.S., on various Forms of Silica, 159  
 Sirius, the Companion of, 428  
 Sivewright (J.), Preece and Sivewright's "Telegraphy," 511  
 Skeleton, Inquest on a, in New Zealand, 196  
 Skin-scrapers, Flint, from New Jersey, 270  
 Sloths, Protective Resemblance in the, J. C. Galton, 187  
 Small-pox of Sheep, E. Klein, F.R.S., 467  
 Smith (Hermann) on the Nature of Musical Pipes having a Propulsive Mode of Action, 511  
 Smith (Worthington G.), Fertilisation of Basidiomycetes, 186; Potato Disease, 524  
 Smithsonian Institution, Report of, 94  
 Smyth (R. B.), Geological Map of Australia, 352  
 Smyth (Prof. Piazza), Scientific Research the [Promotion of Science, 45  
 Snow, Red, 414  
 Socotra, the Island of, 414, 426  
 Solar Eclipses of 1605, 108; of 1999, 169; of 1876, March 25, 248; Total, of 1876, 268; of 1706, 307; of 1883, 406  
 Solar Halos, 495, 512; Coloured, 404, 426, 466  
 Solar Spectra, Capt. Abney on Photographing, 419  
 Solar Spots, Veiled, Mr. Trouvelot on, 497  
 Somerset House and the Public Analysts, 242  
 Somersetshire, Floods in, 155  
 Sorby (H. C., F.R.S.), Address at Microscopical Society, 384; Apparatus for Measuring Spectra, 159; Colour of Flowers Grown in the Dark, 465; the Evolution of Hæmoglobin, 306; Measuring Bands in Spectra, 39; Relation between Microscope and Molecules of Matter, 332  
 Sound, Prof. Osborne Reynolds on the Refraction of, 218; Prof. Stein on the Formation of, 78  
 South Kensington, Lectures on Botany at, 436; Loan Exhibition of Scientific Apparatus at, 36, 196, 231, 274, 295, 315, 349, 375, 413, 503; Musical Instruments at, 443  
 Southall (J. C.), "The Recent Origin of Man," 245, 484, 510  
 Southport, Aquarium, 197; Botanic Garden and Museum at, 495  
 Southworth (A. S.), "Four Thousand Miles of African Travel," 43  
 Spectra, D-line, Major W. A. Ross, 366; Prof. G. G. Stokes, F.R.S., 247  
 Spectra, H. C. Sorby, F.R.S., Apparatus for Measuring, 159; Measuring Bands in, 39; of Solutions, New Form of Tube for Observing, 74; of Stars, Padre Secchi, 480  
 Spectroscopy, J. Norman Lockyer, F.R.S., on some Recent Methods of, 239  
 Spectrum Analysis, Prof. Stokes, F.R.S., on the Early History of, 188  
 Spectrum of Fish-pigment, George Francis, 167  
 Spectrum, Photography of Red End of the, Capt. W. de W. Abney, 432  
 Sphygmograph, M. Bouilland on the, 114  
 Spiders, Old and New World, 281  
 Spinoza, Proposed Statue of, 315  
 Spottiswoode (W., F.R.S.), Experiment on Electro-magnetic Rotation, 498  
 Spring Plants, the Flowering of, Alex. Buchan, 249  
 Squirrels, Cherry Blossoms destroyed by, 26  
 Stanford's Map of India, 95; Geographical Maps, 396  
 Stanley's Exploration of Africa, 35, 53, 76, 93  
 Stars, 226; Atlas Pleiadum, 453, 129; B.A.C. 793, 419; Binary, 69, 287, 249; the Binary  $\gamma$  Coronæ Australis, 248; Double, 449; Double, Rugby Catalogue of, 287; 40 Eridani, 8; Proper Motion of  $\alpha^2$  Centauri, 8; Variable, 27, 150, 227, 306, 326, 367, 467, 486  
 Stationary Liquid Waves, Dr. Guthrie, 99  
 Steam, Physical Constitution of, J. J. Murphy, 466  
 Stein (Prof.) on the Formation of Sound, 78  
 Stenographic Exhibition at Rome, 114  
 Sterlets at the Manchester Aquarium, 77  
 Stevenson (Thos.), Proposed Optical Barometer, 150  
 Stewart (Prof. Balfour, F.R.S.) on Measuring the Heat of the Sun, 118  
 Stieler's Hand Atlas, 236  
 Stockholm Academy of Sciences, 320  
 Stockwell (J. N.), Theory of the Moon's Motions, 88  
 Stokes (Prof. G. G., F.R.S.), D-line Spectra, 247; the Early History of Spectrum Analysis, 188  
 Stoliczka's (Dr.) Collection of Mammals, 106, 109  
 Stone (Dr.), on Thermopiles, 59  
 Stoney (Prof. Johnstone, F.R.S.), on Radiometers, 420  
 Storer (F. H.), Cherry Blossoms destroyed by Squirrels, 26  
 Storms: Blasius on, 421; T. S. Osborne, 406; Faye on the Laws of, 11, 87, 187  
 Strange (Col., F.R.S.), Obituary Notice of, 396, 408  
 Strata, Bristow's Tables of British, 64  
 Stream Lines, Wm. Froude, F.R.S. on, 50, 89, 130, 169  
 Struve's Companion of Procyon, 406  
 Submarine Explorations, W. Topley, 133  
 Sub-Wealden Exploration, 175, 334, 396  
 Sulphurous Acid Ice-Machine, Raoul Pictet's, 432  
 Sumatra, Exploration of, Dr. A. A. W. Hubrecht, 209  
 Sun: Prof. Balfour Stewart on Measuring the Heat of the, 118; P. A. Secchi on Ericson's Researches on the, 46; Origin of the Heat of the, W. Coutie, 126; the Bothkamp Observations, 402; Rotation of, and Moon's Revolution and the Earth's Magnetism, 466  
 Sun-spots, 497; and the price of corn, 15; Father Secchi on, 137  
 Surrey Commercial Docks, Excavations at, 77  
 Sussex, Flora of, 155  
 Sutton (Dr. G.), Report on Trichinosis, 105  
 Sweden: Rainfall of, 436; Tornado in, 216  
 Swedish Arctic Expedition, 16, 116  
 Switzerland, Traces of Man in the Glacial Coal-beds of, 130  
 "Syllabus of Plane Geometry," 102  
 Symonds (Rev. W. S.), Ancient Glacier Action in Central France, 67; the Fossil Skeletons of Le Puy en Velay, 207; Ancient Glaciers in France, 425  
 Tacchini (Prof.), Sun-spots, 497  
 Tait (Prof.), on the Earth's Age, 486; "Recent Advances in Physical Science," Prof. Clerk Maxwell, F.R.S., 461  
 Tartaric and Citric Acids, 78  
 Tea, Cultivation of, in India, 175  
 Telegraph Cables, Testing of Deep Sea, 517  
 "Telegraphy," Preece and Sivewright's, 441  
 Telescope, the Great, of the Paris Observatory, 229  
 Thames, High Tides in the, 54  
 Thermal Energy and Radiation; Capt. J. Ericsson, 114, 224  
 Thermometer, Self-registering, 79  
 Thermopiles, Dr. Stone on, 59  
 Theophrastus versus Millington, 127  
 Thibet, Upper, Mirage in, 67  
 Thomson (Prof. Wyville), Obituary Notice of Dr. von Willemoes Suhm, 88; the Work of the *Challenger*, 70  
 Thorell (T.), European and North African Spiders, 281  
 Thorpe (Prof. T. E.), Specific Volumes of Liquids, 397  
 Three Kingdoms of Nature, 367, 386  
 Thurston (Prof. R. H.), "The Mechanical Engineer," 16  
 Tides, Extraordinary, B. G. Jenkins, 69  
 Tilden (W. A.), Physical Science in Schools, 373  
 "Timber and Timber Trees," Laslett's, 181  
 Time, Correct, in Country Towns, 95  
 Tissandier's Photography; R. Meldola, 204  
 Tomlinson (C., F.R.S.), on Safety Matches, 469  
 Tomsk University, 357  
 Topley (W.), Channel Tunnel—Submarine Explorations, 133  
 Tornado in Sweden, 216  
 Toulouse, New Telescope at the Observatory, 16  
 "Tour de France," 135  
 Trade Winds, Course of the, 12  
 Tramways, Condensed Air, 228; Steam Engines on, 77  
 Transit of Venus, 238  
 Trees, Effects of Lightning on, 120  
 Trichinosis, Dr. G. Sutton's Report on, 105  
 Troglodytes, French and Swiss, 401  
 Trogonidae, J. Gould's Monograph of the, 166

- Tube for observing Spectra of Solutions, New Form of, 74  
 Tucker (R.), Morell's Euclid Simplified, 427  
 Tuckwell (Rev. W.), Physical Science in Schools, 412  
 Tufted Deer of China, 334  
 Tuning Forks, Prof. Stern on, 38  
 Tylor (E. B., F.R.S.), "Dammann's Race Photographs," 184  
 Tylor (A.), Marine Deposits, 199  
 Tyndall (Prof., F.R.S.), Acoustic Cloudiness, 72; on Germs, 252, 268, 324, 347; Dr. H. Charlton Bastian, F.R.S., 284, 305; L. Pasteur, 305  
 Typhoid Fever, How it is Spread, 428, 447  
 Tyrol and the Tyrolese; W. A. B. Grohman, 206
- Uintatherium, Prof. W. H. Flower, F.R.S., 404  
 Ulrich (G. H. F.), Rocks and Minerals in the Melbourne Museum, 165  
 United States: Archaeological Researches in Kentucky and Indiana, 109; Collection of Mineral Products of, 77; Geological Survey of, 156, 314, 356; Hopkins University, 412; Map of Colorado, 414; Meteorological Charts of, 53; National Academy of Sciences, 214; National Museum, 236; New York Lyceum, 531; Survey Publications, 385; Weather Maps of, 95; Weather Reports, 397; *see also* America, Philadelphia, &c.  
 Universities Bill, 314, 341  
 University College, Ladies' Classes at, 235  
 University College, Bristol, 488  
 University of London and School Examinations, 261, 286  
 University Reform, 368, 381  
 "Unseen Universe," the, J. Emery, 485  
 Uranus, Satellites of, 87, 208  
 Usborne (T.S.), Storms, 406
- Valhalla des Sciences Purés et Appliquées, 266  
*Valorous*, the Work of the, 250  
 Vanadium, the Physiological action of, 78  
 Van Beneden's "Animal Parasites," Dr. Spencer Cobbold, F.R.S., 303  
 Variable Stars, 27, 150, 227, 306, 326, 367, 467, 486  
 Venus, the Rotation of, 513  
 Verhandlungen der k. k. geologischen Reichsanstalt, 137  
 Vertebrate Animals, Origin of, Prof. Huxley, F.R.S., 388, 410, 429, 467, 514  
 Vesuvius, Mount, 94, 135, 155, 414, 436  
 Victoria and Albert Palace Association, 436  
 Victoria Cave, Report on the, 55  
 Victoria, Chinese Miners in, 256  
 Victoria Institute, 200, 240, 299, 440  
 Vienna Academy of Sciences, 179, 200, 260, 280; Geological Society, 179, 220, 319; New Observatory at, 192  
 Vignoles (C. B., F.R.S.), Obituary Notice of, 73  
 Vincent (C. W.), Year-Book of Facts, 1875, 365  
 Vivisection, 113, 321, 342, 385, 396  
 Volcanic Eruptions in Iceland, 135  
 Volcanic Rocks of the Canaries, 403  
 Volcanoes: Eruption of Vesuvius, 94, 135, 155, 414, 436; Mount Tongariro, 135  
 Volpicelli (Prof. P.), Notice (*with Portrait*) of Sir Charles Wheatstone, 501; Researches in Electrical Induction, 437, 475  
 Vyvyan (Rev. T. G.), "Analytical Geometry," 24
- Walker (H.), Plagiarism and Prof. Boyd Dawkins, 7, 26  
 Warrington (R.), Tartaric and Citric Acids, 78  
 Wasps, Ants, and Bees, Sir J. Lubbock on, 37  
 Water a Mineral, 367, 386  
 Water, Organic Impurities of Drinking, Prof. Frankland, F.R.S., 330  
 Waterspouts and Eddies, 11  
 Water Supply of the Metropolis, 201, 392, 425  
 Watford Natural History Society, 319, 376
- Watts (Dr. W. Marshall), Physical Science in Schools, 311, 455, 491  
 Waves, Capt. W. W. Kiddle on the Effect of, 108  
 Weather Charts, Hoffmeyer's Synoptic, 85  
 Weather Maps of the United States, 95  
 Webb (Rev. T. W.), Caroline Herschel, 361; Meteor in the Daytime, 187, 207  
 "Weight" and "Mass," the Use of the Words, 325, 385, 405, 446, 466, 484  
 Wellington (N. Z.), Philosophical Society, 179  
 Welwitsch (Dr.), his Botanical Collections, 76  
 West (G. Herbert), Science Teaching to Young Children, 48  
 Westminster Aquarium, 255, 274  
 Weyprecht (Lieut.), Arctic Exploration, 33  
 Whale, Prof. Flower, F.R.S., on a new, from New Zealand, 149  
 Wheatstone (Sir Charles), Notice of (*with Portrait*), by Prof. P. Volpicelli, 501; Legacies of, 76  
 Wheeler (Lieut.), Expedition to New Mexico, 76  
 Whitaker (W.), Geological Record for 1874, 322  
 White (Gilbert), Unpublished Letters of, 496  
 "White Conquest," Hepworth Dixon's, 23  
 Wiedersheim on Amphibians, 30  
 Wigan, Mining and Mechanical School, 174  
 Wild Birds' Protection Acts, 315  
 Wilde (Sir W., M.D.), Obituary Notice, 527  
 Wilkinson (Sir J. G., F.R.S.), Death of, 16  
 Willemoes-Suhm (Dr. von), 52, 129; Obituary Notice of, Prof. Wyville Thomson, 88  
 Williams (W. Mattieu), the Difficulties of Public Analysts, 266; Science Classes and Penny Lectures in Birmingham, 149  
 Willis (J.), Internal Heat of the Earth, 8  
 Wills (A. W.), Some Unsolved Problems in the Management of the Marine Aquarium, 189  
 Willson (W. G.), Meteorology of Bengal, 66  
 Wilson (A.), "The Abode of Snow," 4  
 Wilson (Dr. Andrew), Physical Science in Schools, 412  
 Wilson (J. M.), Physical Science in Schools, 329, 354, 371, 472  
 Winchester College Natural History Society, Report of, 19  
 Winds, Climatic Characteristics of, 520  
 Wine, Pseudo, from Tsien-ia, 175  
 Wöhler (F.), Autobiographical Sketch of, 80  
 Wood (W. W.), Saw-fish Inhabiting Fresh Water, 107  
 Woodpeckers and Wrynecks, Prof. Parker, F.R.S., on the, 173  
 Wortley (Col. Stuart), Photography in the *Challenger*, 25  
 Wright (T.), "The Celt, the Roman, the Saxon," 16  
 Wrynecks and Woodpeckers, Prof. Parker, F.R.S., on the, 173  
 Wyles (T.), Physical Science in Schools, 454
- Yarkand, the Mammals of, 109  
 Yarmouth Aquarium, 77  
 Year-book of Facts, 1875, 365  
 Year-book of Photography, 256  
 Yellow Glass for Use in Zoological Collections, 488  
 Yorkshire College of Science, Scholarship at, 35  
 Youmans (Dr. E. L.), "Class-book of Chemistry," 424
- Zambesi, E. Mohr's Work on, 384  
 Zeitschrift der Oesterreichischen Gesellschaft für Meteorologie, 97, 137, 157, 218, 497, 532  
 Zeitschrift für Wissenschaftliche Zoologie, 157, 257  
 Zodiacal Light, 169; the "Gegenschein" of the, 129  
 Zoological Collections, Yellow Glass for, 488  
 Zoological Gardens, Additions to, 17, 37, 54, 77, 114, 136, 156, 175, 198, 218, 237, 257, 274, 297, 316, 336, 358, 376, 397, 414, 458, 475, 496, 532  
 Zoological Gardens in America, 76  
 Zoological Society, 39, 79, 139, 219, 258, 298, 339, 399, 439, 499; Lectures, 374  
 Zoology, Dr. Sclater's Geographical, 482  
 Zuyder Zee, the Drainage of the, 288

